Exploring the Extreme			
2007 Science			
Grade Level and High School Content Expectations			
Michigan Science			
Grade K			
Activity/Lesson	**State**	**Standards**	
Finding the Center of Gravity Using Rulers	MI	SCI.K.S.IP.00.12	Generate questions based on observations.
Finding the Center of Gravity Using Rulers	MI	SCI.K.S.IP.00.13	Plan and conduct simple investigations.
Finding the Center of Gravity Using Rulers	MI	SCI.K.S.IP.00.14	Manipulate simple tools (for example: hand lens, pencils, balances, non-standard objects for measurement) that aid observation and data collection.
Finding the Center of Gravity Using Rulers	MI	SCI.K.S.IA.00.12	Share ideas about science through purposeful conversation.
Finding the Center of Gravity Using Rulers	MI	SCI.K.S.IA.00.13	Communicate and present findings of observations.
Exploring the Extreme			
2007 Science			
Grade Level and High School Content Expectations			
Michigan Science			
Grade 1			
Activity/Lesson	**State**	**Standards**	
Finding the Center of Gravity Using Rulers	MI	SCI.1.S.IP.01.12	Generate questions based on observations.
Finding the Center of Gravity Using Rulers	MI	SCI.1.S.IP.01.13	Plan and conduct simple investigations.
Finding the Center of Gravity Using Rulers	MI	SCI.1.S.IP.01.14	Manipulate simple tools (for example: hand lens, pencils, rulers, thermometers, rain gauges, balances, non-standard objects for measurement) that aid observation and data collection.
Finding the Center of Gravity Using Rulers	MI	SCI.1.S.IA.01.12	Share ideas about science through purposeful conversation.
Finding the Center of Gravity Using Rulers	MI	SCI.1.S.IA.01.13	Communicate and present findings of observations.
Exploring the Extreme			
2007 Science			
Grade Level and High School Content Expectations			
Michigan Science			
Grade 2			

Activity/Lesson	State	Standards	
Finding the Center of Gravity Using Rulers	MI	SCI.2.S.IP.02.12	Generate questions based on observations.
Finding the Center of Gravity Using Rulers	MI	SCI.2.S.IP.02.13	Plan and conduct simple investigations.
Finding the Center of Gravity Using Rulers	MI	SCI.2.S.IP.02.14	Manipulate simple tools (ruler, meter stick, measuring cups, hand lens, thermometer, balance) that aid observation and data collection.
Finding the Center of Gravity Using Rulers	MI	SCI.2.S.IA.02.12	Share ideas about science through purposeful conversation.
Finding the Center of Gravity Using Rulers	MI	SCI.2.S.IA.02.13	Communicate and present findings of observations.
Exploring the Extreme			
2007 Science			
Grade Level and High School Content Expectations			
Michigan Science			
Grade 3			
Activity/Lesson	**State**	**Standards**	
Finding the Center of Gravity Using Rulers	MI	SCI.3.S.IP.03.12	Generate questions based on observations.
Finding the Center of Gravity Using Rulers	MI	SCI.3.S.IP.03.13	Plan and conduct simple and fair investigations.
Finding the Center of Gravity Using Rulers	MI	SCI.3.S.IP.03.14	Manipulate simple tools that aid observation and data collection (for example: hand lens, balance, ruler, meter stick, measuring cup, thermometer, spring scale, stop watch/timer).
Finding the Center of Gravity Using Rulers	MI	SCI.3.S.IA.03.13	Communicate and present findings of observations and investigations.
Finding the Center of Gravity Using Plumb Lines	MI	SCI.3.S.IP.03.13	Plan and conduct simple and fair investigations.
Finding the Center of Gravity Using Plumb Lines	MI	SCI.3.S.IP.03.14	Manipulate simple tools that aid observation and data collection (for example: hand lens, balance, ruler, meter stick, measuring cup, thermometer, spring scale, stop watch/timer).
Finding the Center of Gravity Using Plumb Lines	MI	SCI.3.S.IA.03.13	Communicate and present findings of observations and investigations.
Finding the Center of Gravity Using Plumb Lines	MI	SCI.3.S.RS.03.11	Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.

Changing the Center of Gravity Using Moment Arms	MI	SCI.3.S.IP.03.14	Manipulate simple tools that aid observation and data collection (for example: hand lens, balance, ruler, meter stick, measuring cup, thermometer, spring scale, stop watch/timer).
Changing the Center of Gravity Using Moment Arms	MI	SCI.3.S.IP.03.15	Make accurate measurements with appropriate units (centimeters, meters, Celsius, grams, seconds, minutes) for the measurement tool.
Changing the Center of Gravity Using Moment Arms	MI	SCI.3.S.IA.03.13	Communicate and present findings of observations and investigations.
Exploring the Extreme			
2007 Science			
Grade Level and High School Content Expectations			
Michigan Science			
Grade 4			
Activity/Lesson	**State**	**Standards**	
Finding the Center of Gravity Using Rulers	MI	SCI.4.S.IP.04.13	Plan and conduct simple and fair investigations.
Finding the Center of Gravity Using Rulers	MI	SCI.4.S.IP.04.14	Manipulate simple tools that aid observation and data collection (for example: hand lens, balance, ruler, meter stick, measuring cup, thermometer, spring scale, stop watch/timer, graduated cylinder/beaker).
Finding the Center of Gravity Using Rulers	MI	SCI.4.S.IA.04.12	Share ideas about science through purposeful conversation in collaborative groups.
Finding the Center of Gravity Using Rulers	MI	SCI.4.S.IA.04.13	Communicate and present findings of observations and investigations.
Finding the Center of Gravity Using Plumb Lines	MI	SCI.4.S.IP.04.13	Plan and conduct simple and fair investigations.
Finding the Center of Gravity Using Plumb Lines	MI	SCI.4.S.IA.04.12	Share ideas about science through purposeful conversation in collaborative groups.
Finding the Center of Gravity Using Plumb Lines	MI	SCI.4.S.IA.04.13	Communicate and present findings of observations and investigations.
Finding the Center of Gravity Using Plumb Lines	MI	SCI.4.S.RS.04.11	Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
Changing the Center of Gravity Using Moment Arms	MI	SCI.4.S.IP.04.14	Manipulate simple tools that aid observation and data collection (for example: hand lens, balance, ruler, meter stick, measuring cup, thermometer, spring scale, stop watch/timer, graduated cylinder/beaker).

Changing the Center of Gravity Using Moment Arms	MI	SCI.4.S.IP.04.15	Make accurate measurements with appropriate units (millimeters centimeters, meters, milliliters, liters, Celsius, grams, seconds, minutes) for the measurement tool.
Changing the Center of Gravity Using Moment Arms	MI	SCI.4.S.IA.04.12	Share ideas about science through purposeful conversation in collaborative groups.
Changing the Center of Gravity Using Moment Arms	MI	SCI.4.S.IA.04.13	Communicate and present findings of observations and investigations.
Exploring the Extreme			
2007 Science			
Grade Level and High School Content Expectations			
Michigan Science			
Grade 5			
Activity/Lesson	**State**	**Standards**	
Jet Propulsion	MI	SCI.5.S.RS.05.15	Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
Vectoring	MI	SCI.5.S.IP.05.11	Generate scientific questions based on observations, investigations, and research.
Vectoring	MI	SCI.5.S.IP.05.12	Design and conduct scientific investigations.
Center of Gravity, Pitch, Yaw	MI	SCI.5.S.IP.05.14	Use metric measurement devices in an investigation.
Center of Gravity, Pitch, Yaw	MI	SCI.5.S.RS.05.16	Design solutions to problems using technology.
Exploring the Extreme			
2007 Science			
Grade Level and High School Content Expectations			
Michigan Science			
Grade 6			
Activity/Lesson	**State**	**Standards**	
Jet Propulsion	MI	SCI.6.S.RS.06.15	Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
Vectoring	MI	SCI.6.S.IP.06.11	Generate scientific questions based on observations, investigations, and research.
Vectoring	MI	SCI.6.S.IP.06.12	Design and conduct scientific investigations.
Center of Gravity, Pitch, Yaw	MI	SCI.6.S.IP.06.14	Use metric measurement devices in an investigation.
Center of Gravity, Pitch, Yaw	MI	SCI.6.S.RS.06.15	Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
Center of Gravity, Pitch, Yaw	MI	SCI.6.S.RS.06.16	Design solutions to problems using technology.
Exploring the Extreme			

2007 Science			
Grade Level and High School Content Expectations			
Michigan Science			
Grade 7			
Activity/Lesson	**State**	**Standards**	
Jet Propulsion	MI	SCI.7.S.RS.07.15	Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
Vectoring	MI	SCI.7.S.IP.07.11	Generate scientific questions based on observations, investigations, and research.
Vectoring	MI	SCI.7.S.IP.07.12	Design and conduct scientific investigations.
Center of Gravity, Pitch, Yaw	MI	SCI.7.S.IP.07.14	Use metric measurement devices in an investigation.
Center of Gravity, Pitch, Yaw	MI	SCI.7.S.RS.07.15	Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities.
Fuel Efficiency	MI	SCI.7.S.IP.07.15	Construct charts and graphs from data and observations.